

Belnet will have new ultra high-performance optical network as from August 2014

- Education, research institutions and government agencies will be able to use up to 100Gbit/s Internet bandwidth
- Upgrade of IP network in 2015

Brussels, xx April 2014 - Belnet, the organization responsible for the national research network for Belgian universities, other higher education establishments, research centres and government departments, is upgrading its optical network. The deployment was awarded to network specialist Ciena. In August 2014, the new optical network will be taken into use.

With this upgrade, Belnet is responding to the changing needs of users, as well as increasing demand for higher bandwidths. The new network is a mesh network which can handle 88 x 100 Gbit/s on each fibre optic link. As a comparison: on the existing network, capacity is 42 x 10 Gbit/s per ring.

"This upgraded network will enable the over 200 member organizations of Belnet to count on a state-of-the-art network", says Jan Torreele, Director of Belnet." Since we have also set up a dense and decentralized network, the business continuity of the Belgian education and research sector is guaranteed."

"Modernising its infrastructure with Ciena's 6500 Packet-Optical Platform will allow Belnet to create an intelligent, dynamic next-generation Ethernet network that can accommodate demanding, high-bandwidth applications and services," says Virginie Hollebecque, Head of Enterprise and Public Sector for EMEA, at Ciena.

The new fine-meshed network will bring member institutions even greater stability and higher performance. Other benefits include reduced waiting times (latency) because a direct connection is possible between any two locations (PoPs) on the network, via the shortest route. The new network will also enable Belnet to respond better to the needs of R&D organizations. With the new network, they can connect multi-points, a service to interconnect geographically disparate sites to deliver higher bandwidths.

Besides the commercial Internet, the Belnet network is also linked to the European research network GÉANT3. This network interconnects educational and research institutions from all over the world.

Focused on the future

The new network can offer member organizations connections at 100 Gbit/s, but in the future Belnet will extend this to connections of 200 Gbit/s and more. In addition, in the longer term, Software Defined Networking (SDN) technology will be integrated, which allows users to manage their networks more flexible and to realize cost reduction.

The IP network is due to be upgraded too in 2015. The new optical network is the flexible building block for this to happen. The migration of all users to the new network is planned for the third quarter of 2015.

About Belnet:

Belnet is the federal governmental organisation that has been responsible, since 1993, for the Belgian national research network that provides very high bandwidth internet access and internet services to Belgian universities, schools and colleges, research centres and governmental departments. BELNET has over 50 employees and is part of the Federal Science Policy. It provides its services exclusively to about 200 institutions representing around 700,000 end users. Thanks to its acquired expertise, its unique market position and scale advantages, BELNET wishes to help accelerate the growth of knowledge and information society in Belgium. Belnet is also responsible for BNIX, the Belgian National Internet Exchange, and CERT.be, the national Computer emergency Response Team. For more information, visit www.belnet.be